Granite Mountain

CA-010-090

GRANITE MOUNTAIN WILLDERNESS STUDY AREA (WSA)

(CA-010-090)

THE STUDY AREA ----

58,238 acres

The Granite Mountain WSA is located in east-central Mono County, approximately 17 miles west of Benton, California. The WSA includes 54,178 acres of Bureau of Land Management (BLM) land, 3,867 acres of Inyo National Forest Land (USFS), and 193 acres of private inholdings. No State land is located in the unit (see Map 1 and Table 1).

The northern boundary of the WSA begins at the Mono Lake Scenic Area and proceeds easterly along a ranching road. It bypasses a cherry-stemmed windmill and some private land prior to intersecting the Dobie Meadows/Deep Wells county road. The boundary turns south and follows the road, skirting a cherry-stemmed windmill, some private land, and a primitive vehicle route. At State Highway 120, the boundary turns southwest. A review of the WSA map shows this southern extremity of the WSA as an irregular, convoluted boundary feature that follows or bypasses ranching roads, a material site right-of-way, cherry-stemmed wells and spring developments, and the Inyo National Forest boundary. The boundary turns north along private land and follows a ranching road and the Mono Basin Scenic Area border until it rejoins the WSA's northern boundary.

The WSA is located along the western edge of the Basin and Range geomorphic province and comprises a broad landscape of various physical features. The western portion of the WSA lies several miles east and south of Mono Lake, occupying the southeast and central edges of Mono Basin. This portion of the WSA consists of westward-sloping fill deposits from ancient Lake Russell. These surface-fill deposits are composed of fine gravel silt and sand with interbedded sand and gravel material. The eastern portion of the WSA includes rugged granitic mountain complexes and rolling basalt hills with numerous closed basins. A small portion of Adobe Valley lies in the southeast corner of the WSA. Elevation ranges from 6,500 feet to 8,900 feet. The primary soil type of this WSA is sandy, pumiceous earth. Vegetation in the WSA varies and includes varieties of mixed desert shrubs and stands of pinyon pine and Utah juniper.

The unit provides a variety of visual amenities that are vividly striking during morning and evening hours. The Granite Mountain range, in the southern portion of the WSA, contains irregular granitic crags which are especially scenic and visually appealing. Cowtrack Mountain, in the center of the WSA, is composed of volcanic pumice which sharply contrasts with the nearby granitic rock formations.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EIS) for the

Benton-Owens Valley/Bodie-Coleville Wilderness Study Areas. A summary of the area's wilderness values was included in the Final EIS. Three different suitability recommendations were analyzed in the EISs: all wilderness, partial wilderness recommending approximately 62% of the area suitable, and no wilderness.

2. RECOMMENDATION AND RATIONALE ---

o acres recommended for wilderness 58,045 BLM & USFS acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all wilderness alternative is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long term. The no wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The WSA is recommended non-suitable because its potential for mineral occurrence and the anticipated increase in livestock forage needs outweigh the area's wilderness values.

Resource conflicts in the WSA include moderate to high geothermal resource potential (half of the WSA is in a Known Geothermal Resource Area). Moderate metallic mineral potential for molybdenum exists west of Cowtrack Mountain and moderate potential for occurrence of metalic minerals exists east of Cowtrack Mountain.

In order to increase forage production and improve the range condition, the Bishop Resource Area Management Framework Plan proposes vegetative treatments to introduce grass and forb species to selected areas of the WSA. Two chemical sprays totalling 2,500 acres and five prescribed burns totalling 5,500 acres are proposed. An additional 569 Animal Unit Months (AUMs) would be available as a result of the planned vegetative manipulations.

There are approximately 40 miles of primitive ways which will remain available for vehicular use.

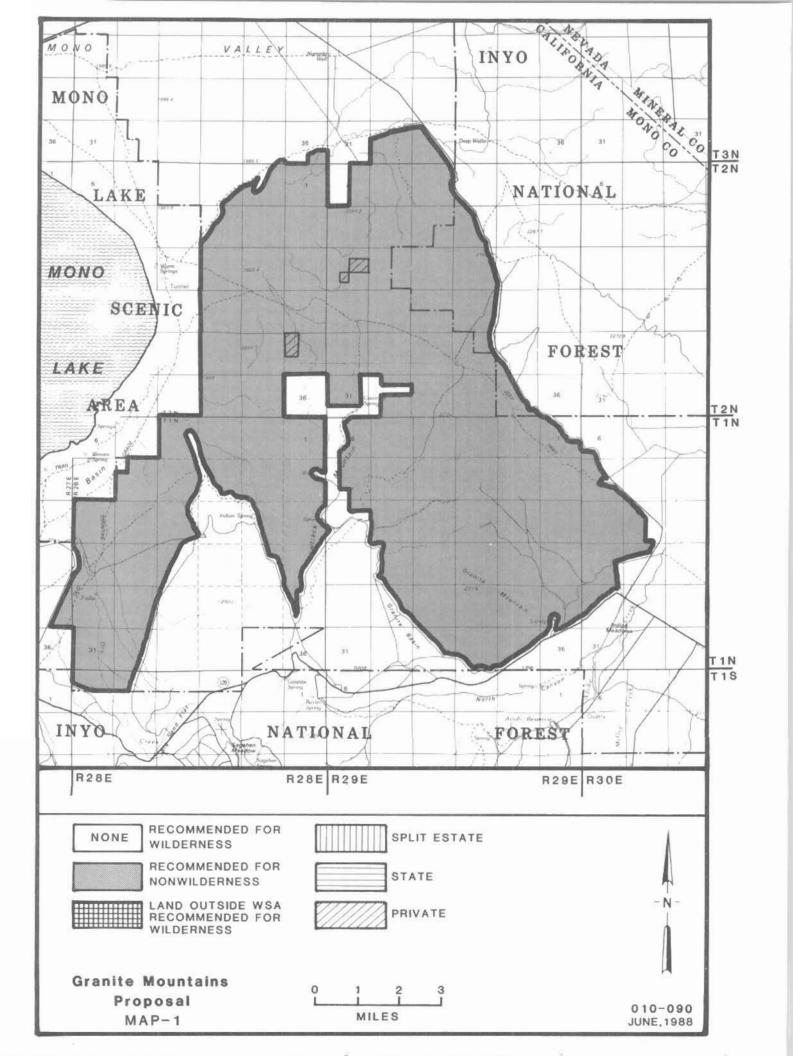


TABLE 1 - Land Status and Acreage Summary of the Study Area

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Within Wilderness Stu	dy <u>Area</u> (surface and subsurface)	Acres
	(BIM surface only)	54,178
	(surface and subsurface)	3,867
	(0,00.
Inholdings		
State		0
Private		193
Total		58,238
Within the Recommende	d Wilderness Study Boundary	Acres
BLM	(within WSA)	0
	(outside WSA)	0
	(within WSA)	0
Split Estate	(outside WSA)	0
Total BIM La	and Recommended for Wilderness	0
Inholdings		
State		0
Private		0
Within the Area Not De	ecommended for Wilderness	3
	(surface and subsurface)	<u>Acres</u> 54,178
	(BIM surface only)	0
	(surface and subsurface)	3,867
	**************************************	-
	and Not Recommended for Wilderness Land Not Recommended for Wilderness 1	54,178
Total USFS I	Land Not Recommended for wilderness*	3,867

¹The USFS has agreed to allow these lands, located in the Inyo National Forest, to be reported as part of BIM's WSR. When Congress acts, the lands will be managed in accordance with the current approved management plan.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The unit has maintained its overall natural character and primitive setting. The WSA consists of varied environments including portions of Mono Basin and Adobe Valley as well as sandy, brush-covered Cowtrack Mountain. Perhaps the most striking portion of the unit is Granite Mountain — a granitic mass of rounded, rocky buttes and buttresses sharply thrust upward from the landscape below. Numerous drainages dissect the WSA resulting in broad, softly eroded canyons and enclosed basins.

The upper elevations of the northern and eastern sides of the WSA are forested with pinyon and juniper. The lower hills and valleys are dominated by sagebrush and other mixed shrubs. The sagebrush covers 65% of the WSA.

Some man-made influences do exist in the WSA but are considered visually negligible due to the unit's large size and variable terrain. In addition, the magnitude of these influences is low. They include pipelines, livestock water troughs, fences, some mining prospects, and approximately 40 miles of primitive, sandy vehicle routes. Some routes are being reinvaded by nearby vegetation giving the routes a "two-track" appearance. Overall, these features have low, negligible effects on naturalness.

In 1984, a wildfire, caused by area visitors, burned most of the vegetation on 2,140 acres north of Cowtrack Spring. Several miles of fire breaks were constructed to prevent the fire from spreading. Although this is four percent of the WSA, the fire occurred in a basin area that is plainly and broadly visible from surrounding hillsides. The area appears as a barren and desolate landscape; windblown sand has masked much of the charred surface.

The fire breaks were closed to prevent vehicle access and the area was aerially reseeded in fall of 1985. Rehabilitation has been, to date, very successful with an initial establishment of grasses, forbs, and shrub species which currently blanket the area.

2. Solitude: The area provides abundant and varied opportunities for solitude. The WSA's size, diverse topographic features, and vegetative screening provide outstanding opportunities for desolation and barrenness throughout the internal basin, thus psychologically heightening one's isolation in the unit.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude

- which are deemed necessary and acceptable as a part of the defense preparedness of the nation.
- 3. Primitive and unconfined recreation: Outstanding opportunities for primitive and unconfined recreation experiences are abundant in the unit. These experiences include hunting, horseback riding, camping, backpacking, nature appreciation, scenic photography, hiking, rock climbing, etc. In addition, there are high scenic values within the WSA—Cowtrack Mountain and Granite Mountain. There are very few permanent water sources in this unit. Water would have to be cached or carried.
- 4. Special features: The unit contains several special features of noteworthy interest. Wildlife values are high in the WSA. The WSA contains deer migration corridors and raptor nesting areas. The deer migration corridors provide an intact natural environment for deer during critical seasonal movements. Remnants of historic Bodie-Mono Mills Railroad and prehistoric sites can also be found.

The WSA contains a population of <u>Friogonum ampullaceum</u>, a United States Fish and Wildlife Service candidate for the threatened and endangered species plant list. The population is located along Deep Wells Road at the extreme eastern edge of the unit. This annual plant is often found in areas having previous surface disturbances. Stability of the population is unknown.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 49,502 acres of the Intermountain Sagebrush/Great Basin Sagebrush and 8,543 acres of the Intermountain Sagebrush/Juniper-Pinyon Woodlands ecosystems. The Granite Mountain WSA would not increase the diversity of the types of ecosystems represented in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification	NWPS Are	220	Other I	BLM Studies
	IMALO LITA	eas	Other I	our ocuates
Domain/Province/PNV	areas	acres	areas	acres
	NATION	WIDE		
Intermountain Sagebrush/		tendo tendo.	992040	
Great Basin Sagebrush	1	32,407	55	1,158,773
Juniper-Pinyon Woodlands	4	81,301	74	2,143,567
	CALIFO	RNIA		
Intermountain Sagebrush/				
Great Basin Sagebrush	0	0	19	174,307
Juniper-Pinyon Woodlands	3	61,701	18	358,097

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of six major population centers. Table 3 summarizes the number and acreage of designated areas and other BIM study areas within a five-hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population	NWPS	NWPS Areas		Other BLM Studies	
Centers	areas	acres	areas	acres	
California					
Fresno	35	4,048,852	28	460,790	
Merced	33	3,957,550	25	348,753	
Modesto	36	4,126,963	81	1,722,326	
Sacramento	46	5,001,817	87	2,479,541	
Stockton	35	4,061,833	46	601,496	
Nevada					
Reno	39	4,647,230	170	6,904,809	

3. Balancing the geographic distribution of wilderness areas: There are no BIM WSAs within 50 air miles recommended for wilderness designation. Yosemite National Park, administered by the National Park Service and the Hoover Wilderness, administered by the Toiyabe and the Inyo National Forests are located approximately 30 miles west of the WSA. These are the nearest designated wilderness areas. Other nearby designated wilderness areas include the Ansel Adams Wilderness which is managed by the Inyo National Forest.

C. Manageability

The Granite Mountain WSA would be manageable as wilderness although some limitations may exist.

Portions of the WSA along the boundaries are vulnerable to indiscriminate off-highway vehicle use. Although this use is low, signing and fencing would be required to protect the unit's integrity. Periodic patrols would also be required.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

Summary of information known at the time of the preliminary suitability recommendation: The Granite Mountain WSA is in the BIM Mono Geology-Energy-Minerals (G-E-M) Resource Area (GRA). BLM G-E-M data in the Affected Environment section of the Wilderness Recommendations Benton-Owens Valley Bodie-Coleville Final Environmental Impact Statement (EIS) in 1987 indicated that the WSA has mostly low potential for metallic minerals with some areas of moderate and some areas of no potential. The EIS states that there is mostly low potential for uranium and thorium with moderate uranium potential in the southern portion and along the eastern edge of the WSA. There is moderate potential from sand and gravel alluvial deposits in some parts of the WSA with no potential in the majority of the WSA. The EIS states that there is no potential for oil or gas. There is a high potential for geothermal resources in the western third with a moderate occurrence potential in the remainder of the WSA.

The G-E-M report states that there is moderate favorability for molybdenum in the southwestern part of the WSA based on the distribution of unpatented claims and on reports of an unconfirmed molybdenum exploration drilling program in this area. The G-E-M report recognizes moderate uranium favorability in the southern portion of the WSA. This occurrence potential is based on the presence of presumed vein-type uranium mineralization in granite. The G-E-M report states that all places in the WSA where alluvium is present have moderate potential for sand and gravel. The G-E-M report identifies an area of unknown metallic mineralization in the southeastern portion of the WSA. The G-E-M report considers this area to have moderate favorability for metallic minerals and speculates about the presence of precious metal occurrences.

There were approximately 60 mining claims in the WSA in 1987. The G-E-M report states that there are several hot springs adjacent to and within the WSA.

Much of the WSA is underlain by Pleistocene volcanics which are indicative of a heat source which is still present at a relatively shallow depth. Based on this geologic assessment, the G-E-M report gave the western third of the WSA high occurrence potential and the eastern two-thirds of the WSA moderate occurrence potential for geothermal resources. The western third of the WSA is in the Mono-Long Valley Known Geothermal Resource Area (KGRA) (USGS, unpublished map, "Iands Valuable for Geothermal Resources", revised July, 1985) There were some geothermal lease applications for this WSA in 1987.

Summary of significant new mineral resource data collected since the suitability recommendation which should be considered in the final recommendation: No U.S. Geologic Survey (USGS) or U.S. Burbau of Mines (BOM) mineral surveys were conducted in this WSA.

No additional information about the mineral potential in this WSA has been received since 1987. As of March 25, 1988, BLM records identified (5) five lode mining claims in this WSA (Table 4). The western one-fifth of the WSA, covering an area of 10,420 acres, is within the Mono-Long Valley KGRA.

Table 4 - Mining Claims

	NO.			ACRES		
TYPE	SUITABLE	NONSUIT.	TOTAL	SUITABLE	NONSUIT.	TOTAL
Mining Claims						
Lode	0	5	5		100	100
Placer	0	0	0	0	0	0
Mill Sites	0	0	0	0	0	0
Total	0	5	5	0	100	100

E. <u>Impacts on Resources</u>

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or non-designation of the entire area as wilderness. (For a full explanation of this summary, refer to the Benton-Owens Valley/Bodie-Coleville Wilderness - Final Environmental Impact Statement.)

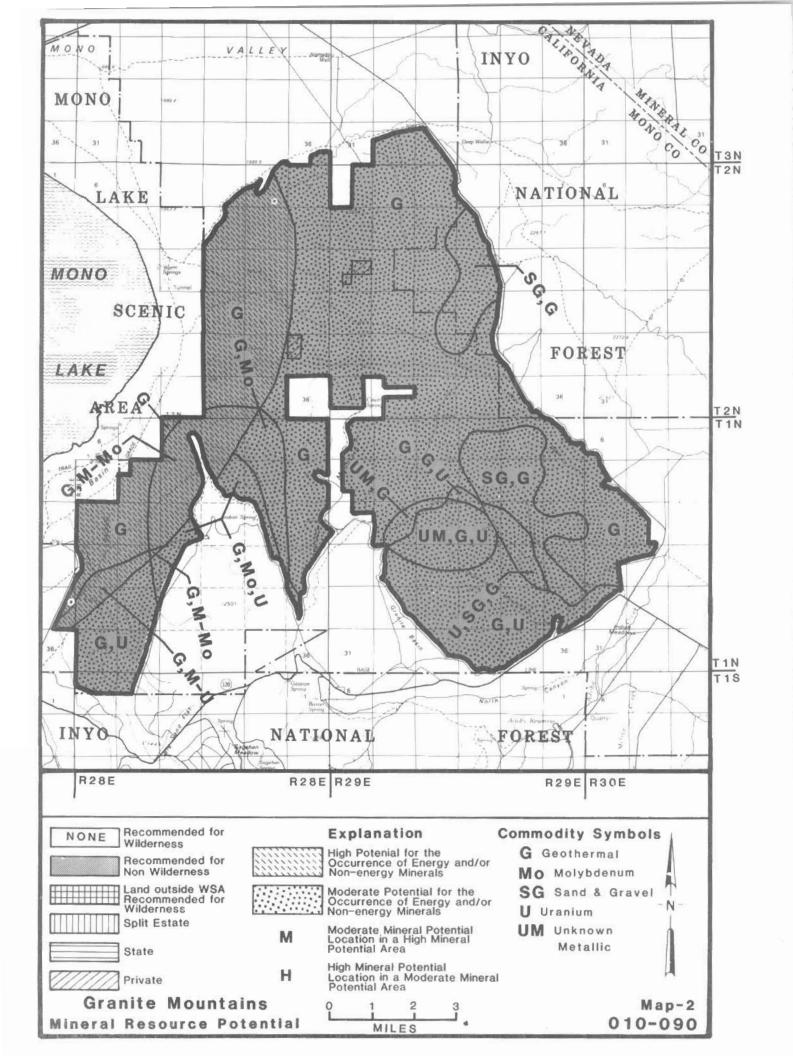


Table 5 - Comparative Summary of Impacts by Alternative

ISSUE-RELATED	HOROSED ACTION	ALL-WILDERNESS	PARTIAL-WILDERNESS
RESURCES	(NO-WILLDERNESS/NO ACTION)	ALTERNATIVE	ALTERNATIVE
Wilderness Values	ness values would originate from projected development of an open-pit gold mine in the western portion of the WSA and anticipated geothermal development in the morthwest portion of the WSA. The open-pit gold mine and the geothermal power facility would result in a direct loss of naturalness on 225 acres. The perception of naturalness and sense of solitude would be impaired	retain and slightly enhance wilderness values by eliminating motorized recreation use (1,100 visitor-days) as well as precluding mineral development and geothernal development. By prohibiting planned vegetative manipulations on 8,000 acres, short-term impacts to naturalness, as well as solitude, would not occur and the existing perception of naturalness would be retained. Proposed livestock projects including water developments and pipe-	There would be a slight positive benefit to wilderness values within the 36,108 acres designated as wilderness. Elimination of 800 visitor-days of motorized recreation use on 30 miles of primitive vehicle routes and precluding vegetative manipulations for increased livestock use (7,350 acres) would retain and enhance the perception of naturalness and the sense of solitude. Special features and opportunities for primitive and unconfined recreation would benefit from prohibiting motorized recreation use.

Table 5 - Comparative Summary of Impacts by Alternative (Cont.)

ISSUE-RELATED	PROPOSED ACTION	ALL-WILLERNESS	PARLIAL-WILLERNESS
RESOURCES	(NO-WILLDERNESS/NO ACTION)	ALTERNATIVE	ALTERNATIVE
Wilderness Values (continued)	pacts on primitive and unon- fined recreation as oppor- tunities would be limited within the areas of mining activity and geothernal devel- opment. There would be slight impacts to special features as a result of continued motorized recreation use. There would be no perceptible impacts anticipated from other projected management actions.		WEA and anticipated geothermal development in the northwestern portion of the WEA. Naturalness would be lost on 225 acres. The perception of naturalness and the sense of soliture would be impaired within 7,500 acres. Livestock projects including prescribed burns would result in short-term impacts to naturalness on 675 acres. Impacts from continued and increased motorized recreation use (400 visitor-days) would be minor. Opportunities for primitive and unconfined recreation would be locally impacted due to mineral and geothermal development as well as continued motor vehicle use of 10 miles of primitive vehicle routes. There would only be reglicible impacts on special features due to projected management actions and uses within the non-designated portion of the WEA.
Motorized Recreation Use	There would be no impact on motorized recreation use which is projected to increase from the current annual level of 1,000 visitor-days to 1,100 visitor-days.	Motorized recreation use totaling 1,000 visitor-days per year within the 58,238-acre WSA would be foregone. Opportunities to shift this use to other nearby public lambs are limited and may result in an overall slight loss of use within the general area. Impacts to the Sierra Safari would mostly necessitate rerouting of their course. Overall, there would be a moderate impact to motorized recreation use.	Overall, there would be a minor impact on motorized recreation use as a result of designating 36,108 acres as wilderness. This portion of the WSA including approximately 30 miles of primitive vehicle routes would be closed to motorized recreation use with 800 visitor-days of use foregone. The remaining 22,130 acres would continue to provide opportunities for motorized recreation use on approximately 10 miles of primitive vehicle routes.

Table 5 - Comparative Summary of Impacts by Alternative (Cont.)

ISSUE-RELATED	PROPOSED ACTION	ALL-WILLDERNESS	PARLIAL-WILLERNESS
RESURCES	(NO-WILLDERNESS/NO ACTION)	ALTERNATIVE	ALTERNATIVE
Motorized Recrea- tion Use (cont.)			The current use of 200 visitor days would be anticipated to increase to a total of 400 visitor-days as a result of displaced use from the designated portion of the WEA. Within the entire WEA there would be a net loss of 600 visitor-days of motorized recreation use.
Livestock Grazing and Range Improvements	There would be no impact to livestock grazing and range improvements. All existing operations and proposed projects would be permitted, including 8,000 acres of vegetative manipulations to increase forage production by 569 ALMs to a total of 3,424 ALMs.	Under the All-wilderness Alternative, planned vege- tative manipulations on 8,000 acres would be pre- cluded and a projected in- crease of 569 ALMs would be foregone. Current livestock use (2,855 ALMs) would con- tinue and all other projected improvements including six water developments and two water pipelines would be permitted. Overall, there would be a minor impact on livestock grazing and range improvements.	Overall, livestock use would increase by 36 ALMs to a total of 2,891 ALMs as a result of 650 acres of prescribed burns within the 22,130 acres of the WSA not designated as wilderness. Vegetative manipulations (7,350 acres) within the 36,108 acres designated wilderness would be precluded and an increase of 533 ALMs would be foregone. Other planned livestock projects would continue throughout the WSA. There would be a minor impact on livestock grazing and range improvements.
Mineral Development	There would be no impact on mineral development. Exploration and development of a moderate potential for metallic minerals would potentially lead to the development of an open-pit gold mine in the western portion of the WSA.	Wilderness designation would result in closing the entire 54,178 acres to mineral entry. Exploration and development of potential mineral resources within the WSA would be foregone, including a potential deposit of disseminated gold in the western portion of the WSA. Development of a potential open-pit gold mine would be prohibited.	considered to have a zero to low potential for minerals. The remaining 22,130 acres not designated as wilderness

Table 5 - Comparative Summary of Impacts by Alternative (Cont.)

ISSUE-RELATED RESCURCES	PROPOSED ACTION (NO-WILLDERNESS/NO ACTION)	ALL-WILLDERNESS ALTERNALIVE	PARTIAL-WILLERNESS ALTERNATIVE
Geothermal. Development.	There would be no impact on geothermal development under the Proposed Action. Exploration and development of geothermal resources would be permitted in the WSA. Development of a 50-Mw geothermal resource is projected.	Geothermal resource development would be prohibited. Development of a potential 50-Mw geothermal resource would be foregone. Over the long term this would result in a minor impact.	There would be no impact on geothernal development under the Partial-wilderness Alternative. Development of a 50-Mw geothernal resource is anticipated within the 22,130 acres not designated as wilderness. While exploration and development within the 36,108 acres designated as wilderness is a low development potential although there is a moderate potential for geothernal resources. No development is anticipated therefore no geothernal resource production would be foregone.
Cultural Resources	Under the Proposed Action, cultural resources within the WEA would be vulnerable to impacts resulting from geothermal resource development, construction of a pipeline for livestock use, and continued motorized recreation use. Surface inventories prior to surface-disturbing activities, and an existing Cultural Resource Management Plan would limit potential impacts within areas of predicted high cultural resource sensitivity and to the historic Bodie-Mono Mills railroad. Mitigating measures would be established to either avoid cultural sites or salvage potential artifacts. Continued motorized vehicle use in the WEA would contribute to continued unauthorized collection of artifacts.	to precluding geothermal development and continued motorized recreation use. The historic Bodie-Mono Mills railroad grade would potentially be regligibly impacted by development of a planned water pipeline for livestock use.	There would be a slight positive benefit to cultural resources within the 36,108 acres of the WSA designated as wilderness as a result of prohibition of motor vehicle use. Within the remaining 22,130 acres, cultural resources would be vulnerable to potential impacts. Surface inventories to determine the location of potential sites and develop appropriate mitigating measures if necessary as well as an existing Cultural Resources Management Plan would minimize potential impacts as a result of geothernal development and construction of a pipeline for livestock. Continued motorized recreation use within the non-designated portion of the WSA would contribute to continued unauthorized collection of artifacts.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

During the inventory phase, a few comments addressed mineral values and geothermal resources. One comment noted the lack of access to private inholdings.

One comment received during the wilderness study process noted outside sights and sounds as influencing wilderness values in the WSA.

A public meeting and public hearing were held in association with the draft environmental impact statement for the WSAs within the EIS area. The public meeting was held in Markleeville, California, and the public hearing in Bishop, California. Comments were received both orally through the hearing, and in writing during the 90-day public review period. A total of 84 written and oral comments were received. Thirty-one comments supported the Bureau's no-wilderness recommendation. Forty-five comments supported the all-wilderness alternative, while eight comments supported the partial-wilderness alternative.

No comments specific to this WSA were received by Federal or State agencies.

Mono County provided a comment during the inventory phase expressing the need for multiple use of the area.